

Application Serial No.: 10/646,842
Amendment dated September 22, 2004
Reply to Office Action of July 2, 2004

REMARKS

Claims 1 through 15 are pending in this application. Claims 11 through 15 are amended herein. Support for the amendments to claims 11 through 15 may be found in claims 11 through 15 as originally filed. Reconsideration is requested based on the foregoing amendment and the following remarks.

Objections to the Claims:

Claims 11 through 15 were objected to for various informalities. Claims 11 through 15 were amended in substantial accord with the Examiner's suggestions. The Examiner's suggestions are appreciated. Withdrawal of the objection is earnestly solicited.

Claim Rejections - 35 U.S.C. § 102:

Claims 1 through 5 and 11 through 15 were rejected under 35 U.S.C. § 102(b) as anticipated by Chen, US 5,242,424. The rejection is traversed.

Claims 1 and 11 recite,

"an automatic air eliminator."

Chen neither teaches, discloses, nor suggests an automatic air eliminator, as recited in claims 1 and 11. In particular, duct 221 is a duct, not an automatic air eliminator, contrary to the assertion in the Office action. Solution is injected into dripping vessel 1 via duct 221 of the solution filling column 22, as shown in Fig. 5 and described at column 2, lines 63-65, rather than air being eliminated, automatically or otherwise. Claims 1 and 11 are submitted to be allowable. Withdrawal of the rejection of claims 1 and 11 is earnestly solicited.

Claims 2 through 5 and 12 through 15 depend from claim 1 or claim 11 and add further distinguishing elements. Claims 2 through 5 and 12 through 15 are thus also submitted to be allowable. Withdrawal of the rejection of claims 2 through 5 and 12 through 15 is also earnestly solicited.

Claim Rejections - 35 U.S.C. § 103:

Claims 1 through 15 were rejected under 35 U.S.C. § 103 as being unpatentable over Chen in view of the McPhee, US 3,776,229. The rejection is traversed. Reconsideration is earnestly solicited.

Chen neither teaches, discloses, nor suggests an automatic air eliminator, as discussed above with respect to claims 1 and 11. McPhee shows no automatic air eliminator either, and

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thus cannot make up for the deficiencies of Chen with respect to claims 1 and 11. Neither Figs. 3, 7, nor 8 of McPhee, in particular, show any automatic air eliminator, contrary to the assertion in the Office action.

Enlarged chamber 4, in fact, is airtight, as described at column 2, lines 61 and 62, rather than vented, automatically or otherwise. Furthermore, roller clamp 11 and valve member 17 are opened and closed manually, as described at column 2, lines 66 and 67, rather than being automatic air eliminators as recited in claims 1 and 11. Finally, filter member 43 in vent passage 30 of upstanding tube 29 is meant to keep any splashing liquid from the enlarged chamber 4 from contaminating the inner connecting air passages 35 and 37, as described at column 4, lines 19-22, rather than being an automatic air eliminator as recited in claims 1 and 11.

Since neither Chen nor McPhee teach, disclose, or suggest an automatic air eliminator, their combination cannot, either. Thus, even if Chen and McPhee were combined as proposed in the Office action, the claimed invention would not result. Furthermore, Chen and McPhee are complete in themselves. It is submitted that persons of ordinary skill in the art would have perceived no reason to modify Chen or McPhee as proposed in the Office action at the time the invention was made.

In particular, Chen already has a valving structure to open to the atmosphere while the chamber is filled to a given volumetric level and liquid dispensed from the chamber, which is what McPhee is discussing at column 1, lines 49-53. Thus, McPhee would have provided no motivation to persons of ordinary skill in the art at the time the invention was made to modify Chen by providing such a valving structure, contrary to the assertion in the Office action, since Chen already has one. What Chen doesn't have, and McPhee can't provide, is an automatic air eliminator, as recited in claims 1 and 11. Claims 1 and 11 are submitted to be allowable. Withdrawal of the rejection of claims 1 and 11 is earnestly solicited.

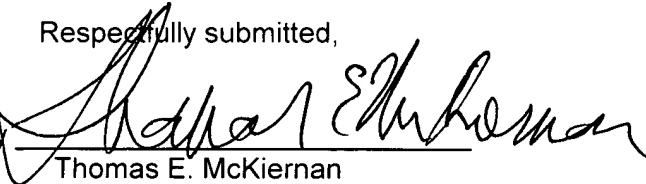
Claims 2 through 10 and 12 through 15 depend from claim 1 or claim 11 and add further distinguishing elements. Claims 2 through 10 and 12 through 15 are thus also submitted to be allowable. Withdrawal of the rejection of claims 2 through 10 and 12 through 15 is earnestly solicited.

Conclusion:

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Accordingly, in view of the reasons given above, it is submitted that all claims 1 through 15 are allowable over the cited references. Since the objections to the claims have been addressed, it is submitted that all of claims 1 through 15 are now allowable. Allowance of all claims 1 through 15 and of this entire application are therefore respectfully requested.

Respectfully submitted,

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